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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,609	01/16/2004	Tetsumasa Sato	60675 (48229)	8169

7590 12/09/2004

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EXAMINER	
HO, TU TU V	
ART UNIT	**PAPER NUMBER**
2818	

DATE MAILED: 12/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/759,609	SATO, TETSUMASA	
	Examiner	Art Unit	
	Tu-Tu Ho	2818	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 January 2004 and 27 July 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-22* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/ Restriction

Claims 1-22 are pending in this application.

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. **Claims 1-7, 16, 20, and 22**, drawn to a method of manufacturing a semiconductor device having a resistive element, classified in class 438, subclass 382.

II. **Claims 8-16 and 21**, drawn to a method of manufacturing a semiconductor device having a resistive element and an insulated gate transistor, classified in class 438, subclass 200.

III. **Claims 17-19**, drawn to a semiconductor device having a resistive element and an insulated gate transistor, classified in class 257, subclass 379.

2. The inventions are distinct, each from the other because of the following reasons:

a. Inventions II and IIII are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case unpatentability of Invention III would not necessarily imply unpatentability of Invention II, since the device of Invention I could be made by processes materially different from those of Invention II. For example, the gate insulator of the lightly insulated transistor (note that although a gate insulator is not recited in Invention III, a gate insulator is inherent – insulated

transistor must have a gate insulator for the transistor to function) could be formed in one step (then, for example, the gate insulator of the heavily insulated transistor could be formed in an additional step), which is different from the three-steps "forming a gate insulation layer of the heavy insulated transistor in a forming region for the heavy insulated transistor by patterning the insulation layer to a predetermined shape, removing the insulation layer in forming regions for the light insulated transistor and the resistive impurity layer, and forming a gate insulation layer of the light insulated transistor in the forming region for the light insulated transistor" as recited in claims 8 or 13 of Invention II.

b. Inventions I and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case unpatentability of Invention III would not necessarily imply unpatentability of Invention I, since the device of Invention III could be made by processes materially different from those of Invention I; and unpatentability of Invention I would not necessarily imply unpatentability of Invention III, since the process of Invention I could be used to make a product materially different from Invention III. For example, the device of Invention III could be made by forming an insulated transistor, which is different from all the steps for forming the resistive element as recited in Invention I; and the process of the Invention I could be used to make a resistive element, which is different from a resistive element and an insulated gate transistor as recited in Invention III.

c. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the manufacturing method of Invention II does not require forming a contact impurity layer by forming a second impurity-doping region in a region, said contact impurity layer having a higher concentration of impurity than said resistive impurity layer as recited in claims 3 and 22 of Invention I. The subcombination has utility by itself, for example, a stand-alone resistor, or, utility in other combinations such as in forming an RCL circuit.

3. Claims 1 or 6 link(s) Inventions I and II. Claim 17 links Invention II and III. The restriction requirement between the linked inventions is subject to the nonallowance of the linking claim(s), claims 1, 6, and 17. Upon the allowance of the linking claim(s), the restriction requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise including all the limitations of the allowable linking claim(s) will be entitled to examination in the instant application. Applicant(s) are advised that if any such claim(s) depending from or including all the limitations of the allowable linking claim(s) is/are presented in a continuation or divisional application, the claims of the continuation or divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is

withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their different classification and their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

5. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu-Tu Ho whose telephone number is (571) 272-1778. The examiner can normally be reached on 6:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DAVID NELMS can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TH

Tu-Tu Ho
December 03, 2004